



# THE ROCKEFELLER UNIVERSITY

1230 YORK AVENUE

NEW YORK, NY 10021

May 29, 1990

JOSHUA LEDERBERG

PRESIDENT

Dr. Walter J. Bock  
Department of Biological Sciences  
Columbia University  
New York, New York 10027

Dear Dr. Bock:

I enjoyed seeing your article in American Zoologist, Vol. 29, No. 3, 1989.

I look forward to meeting and working with you in the Biology Department icw my modest educational role there.

Now I write to ask you for help in tracing the history of an idea in comparative biology. I thought I'd seen it in de Beers (when I took comparative anatomy with James McGregor) but I haven't found it. The idea is that organisms are very complex in their totality. Comparative studies focus on the differences. What is common cancels out. So there is great economy from differential study of development, structure, function and their correlates.

*-a particular reference to (c) on p. 3 attached.*

This approach reached its peak with single gene substitution studies -- the more so as one trusted in a single primary effect of a single gene. Before that comparisons between taxa were tacit proxies for substitution of gene complexes, still finite compared to the whole genome.

This is couched in current day language.

Anyhow can you give me any pointers to the history of this rationale for comparative biology? It may go back to Aristotle.

Yours sincerely,

  
Joshua Lederberg

P.S. May I have a reprint of your 1988 paper, or others on this theme.

*Enc p/258A.*

*X... 043  
5/30/90*